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| LERNER GREENBERG STEMER LLP | | | EXAMINER | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,202

Applicant(s)

GROGOR ET AL.

Examiner

THOMAS A. MORRISON

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,372,925 (De Vries et al.) (hereinafter "De Vries") in view of U.S. Patent No. 3,485,488 (Ellison) (hereinafter "Ellison").

Regarding claim 1, Figs. 1-5 of De Vries show device for singulating overlapping flat mailings in an upright position in a path of travel comprising:

several singulating **sections** (one singulating section adjacent element 60 and one singulating section adjacent element 64) disposed along the path of travel, with an ensemble of conveyor belts (20, 72 and 73), each of the singulating sections (one singulating section adjacent element 60 and one singulating section adjacent element 64) having a respective conveyor belt or belts of the ensemble of conveyor belts (i.e., the singulating section adjacent element 60 has conveyor belt 20, while the singulating section adjacent element 64 has conveyor belts 72 and 73) spaced apart from each other and above each other for transporting the mailings, and each of the singulating sections having, at an opposite side of the path of travel, respective retaining elements

(i.e., a first retaining element that is a portion of element 16 disposed between belts 20 and 73 in Fig. 3 for the singulating section adjacent to element 60, and a second retaining element 64 for the singulating section adjacent to element 64) for acting on the mailings with a friction force and at a height between the conveyor belts,

wherein a speed of travel of the conveyor belt or belts in each singulating section is higher than the speed of travel of the conveyor belt or belts of a respective singulating section (singulating section adjacent element 60) upstream in the direction of travel, individually mounted deflection rollers (including 26 and 32) of the conveyor belt or belts of adjacent singulating sections are disposed at different heights along a common axis (34) at each transition between the singulating sections. De Vries discloses most of the limitations of claim 1 including an ensemble of belts, but does not explicitly disclose each of the singulating sections having respective conveyor **belts** of the ensemble of conveyor belts spaced apart from each other and above each other for transporting the mailings. Rather, De Vries shows a singulating section adjacent element 64 with belts as claimed, and another singulating section adjacent element 60 with one belt instead of multiple belts. Moreover, De Vries discloses a speed of travel of the conveyor belts (72 and 73) of one singulating section is higher than the speed of travel of the conveyor belt (20) of another singulating section, rather than disclosing multiple belts in one singulating section having a speed of travel higher than that of multiple belts in the other singulating section. It is noted that the pulley arrangement in Figs. 2 and 3 of De Vries shows that belt 20 runs around a pulley 26 having a larger diameter than that of the two

smaller pulleys 32 on which belts 72 and 73 run. With this pulley arrangement, belts 72 and 73 run faster than belt 20.

Ellison discloses that it is well known in the art to provide a device for singulating overlapping sheets (including 11) with either multiple conveyor belts (28) or a single conveyor belt, because it is common in the art to replace a single belt with multiple belts as an art known equivalent for singulating sheets. See, e.g., Fig. 1 and column 3, line 55 to column 4, lines 7 of Ellison. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a plurality of belts for the single belt (20) of De Vries, because it is common in the art to replace a single belt with multiple belts as an art known equivalent for singulating sheets, as taught by Ellison. Providing the apparatus of De Vries with multiple belts in place of the one belt 20 results in each of the singulating sections having respective conveyor **belts** of the ensemble of conveyor belts spaced apart from each other and above each other for transporting the mailings, as claimed. Also, it results in a speed of travel of the conveyor **belts** in each singulating section being higher than the speed of travel of the conveyor **belts** of a respective singulating section upstream in the direction of travel, as claimed.

Regarding claim 4, Figs. 1-5 of De Vries show that at each transition between the singulating sections (one singulating section adjacent element 60 and one singulating section adjacent element 64) a receiving area of the downstream singulating section (one singulating section adjacent element 64) has one conveyor belt (72 and 73) more than a transferring area of the upstream singulating section (one singulating section adjacent element 60), wherein center singulating sections (one singulating section

adjacent element 60 and one singulating section adjacent element 64) each have two conveyor belt areas, with drive belts (20, 72 and 73) being coupled by means of a common wide coupling roller (32) and with the conveyor belt area (near 72 and 73) receiving the particular mailings having one conveyor belt more than a transferring conveyor belt area (near 20) in these singulating sections. According to the teachings of Ellison, any of the single belts 20 or 72 or 73 of De Vries can be replaced with multiple belts (e.g., 2 belts). With this in mind, there can be two belts 20, two belts 73 and one belt 72, which meets the limitations of claim 4. Alternatively, there can be two belts 20, one belt 73 and two belts 72, which also meets the limitations of claim 4.

Regarding claim 6, col. 3, line 37 discloses a drive motor of the conveyor belt (20) of each of the upstream singulating sections (one singulating section adjacent element 60) in the direction of travel can be switched off or reduced in speed if the mailing arriving in the respective downstream singulating section has achieved a speed of a receiving conveyor belt of the ensemble of conveyor belts, and the switch-off or reduction persists until a clearance between the mailings, specified for each singulating section, has been determined by means of a line of light barriers arranged along the path of travel.

Regarding the recitation "a drive motor of the conveyor belt of each of the upstream singulating sections in the direction of travel can be switched off or reduced in speed if the mailing arriving in the respective downstream singulating section has achieved a speed of a receiving conveyor belt of said ensemble of conveyor belts, and the switch-off or reduction persists until a clearance between the mailings,

specified for each singulating section, has been determined by means of a line of light barriers arranged along the path of travel" in claim 6, the bolded portion of this recitation includes "conditional limitations" that need not ever occur. For example if the mailing arriving in the respective downstream singulating section **never achieves a speed of a receiving conveyor belt**, there is no requirement whatsoever for the drive motor of the conveyor belt to be switched off or reduced in speed at all. The broadest reasonable interpretation of claim 6 is that the conditional limitation is never met and that there is no switching off or reduction in speed of the drive motor whatsoever. As such, all of the limitations of claim 6 are met by De Vries.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries in view of Ellison as applied to claim 1 above, and further in view of U.S. Patent No. 5,238,236 (Belec et al.) (hereinafter "Belec"). Regarding claim 2, De Vries in view of Ellison discloses multiple conveyor belts (20) receiving the mailings and transferring conveyor belts (72 and 73). However, De Vries in view of Ellison does not explicitly disclose that such conveyor belts have a higher coefficient of friction than respective transferring conveyor belts, as claimed.

Belec discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of conveyor belts (42) receiving mailings, for the purpose of ensuring that such mailings are properly fed away from remaining mailings in a stack. See, e.g., Figs. 1-2 of Belec. Moreover, Belec discloses that it is well known in the art to select conveyor belts (42) receiving the mailings with a higher coefficient of friction than respective transferring conveyor belts (86 and 84), for the purpose of ensuring that such mailings are properly fed away from remaining mailings in a stack. See, e.g., col. 8, lines 44-50 of Belec. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of De Vries with a plurality of conveyor belts having a coefficient of friction that is higher than the transferring conveyor belts (72 and 73) of De Vries for the purpose of ensuring that such mailings are properly fed away from remaining mailings in the stack of De Vries. Thus, all of the limitations of claim 2 are met by this combination of references.

3. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries in view of Ellison as applied to claim 1 above, and further in view of U.S. Patent No. 3,847,383 (Wojtowicz et al.) (hereinafter "Wojtowicz"). Regarding claim 3, De Vries in view of Ellison discloses most of the features of this claim including behind multiple receiving belts (20) of the ensemble of conveyor belts (20, 72 and 73) in a receiving area (near 64) the mailings are arranged, but De Vries does not explicitly disclose that the mailings are arranged at vacuum chambers pulling such conveyor belts, as claimed.

Wojtowicz discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of receiving conveyor belts (18) in a receiving area and vacuum chambers (Figs. 1 and 2) pulling on such conveyor belts (18), because such belt and vacuum chamber arrangement of Wojtowicz virtually eliminates double-feeding by multiple restraint schemes. See, e.g., Abstract and Figs. 1-2 of Wojtowicz. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide that apparatus of De Vries with vacuum chambers pulling on the conveyor belts, because such belt and vacuum chamber arrangement virtually eliminates double-feeding by multiple restraint schemes, as explicitly taught by Wojtowicz. Thus, all of the limitations of claim 3 are met by the combination of references.

Regarding claim 7, in the recitation "a vacuum of the vacuum chamber of each singulating section upstream in the direction of travel can be switched off or reduced if the corresponding mailing arriving in a succeeding singulating section has reached a speed of a receiving conveyor belt of said ensemble of conveyor belts, and the switch-off and or reduction persists until a clearance between the mailings, specified for each singulating section, is determined by means of a line of light barriers arranged along the path of travel" in claim 7, the bolded portion of this recitation includes "conditional limitations" that need not ever occur. For example if the mailing arriving in the respective downstream singulating section **never achieves a speed of a receiving conveyor belt**, there is no requirement whatsoever for the vacuum to be to be switched off or reduced. The broadest reasonable interpretation of claim 7 is that the

conditional limitation is never met and that there is no switching off or reduction in the vacuum whatsoever. As such, all of the limitations of claim 7 are met by De Vries in view of Wojtowicz.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries in view of Ellison as applied to claim 1 above, and further in view of Japanese Publication No. 2-8123 (hereinafter "JP'123"). De Vries in view of Ellison discloses all of the limitations of claim 5, except for a measuring device, as claimed.

JP'123 discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of measuring devices (16a and 16b) in singulating sections for the purpose of detecting take out speed of mailings. See, e.g., Figs. 1-2 and the English abstract of JP'123. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of De Vries in view of Ellison with measuring devices in the singulating sections for the purpose of detecting the take out speed of mailings, as explicitly taught by JP'123.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries in view of Ellison as applied to claim 1 above, and further in view of U.S. Patent No. 5,257,777 (Kalika et al.) (hereinafter "Kalika"). De Vries discloses most of the limitations of claim 8 including retaining elements including a roller (64) for holding back all but one document that is fed from a stack. However, De Vries in view of Ellison does not disclose that such retaining elements are secured on an immovable belt, as claimed.

Kalika discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with singulating sections (Fig. 1) arranged along a path of travel with each singulating section having conveyor belts (including 34 and 34) that feed one document of a stack of documents, and at an opposite side of the path of travel retaining elements (i.e., including elements 64 and 64 in Fig. 3 that are secured to fixed belts 96, 98 and 100) for frictionally engaging and holding back the advance of the remainder of documents in the stack. Because both De Vries in view of Ellison and Kalika teach travel retaining elements for frictionally engaging and holding back the advance of all documents of a stack except for one document being fed, it would have been obvious to one skilled in the art to substitute the travel retaining elements of Kalika for the travel retaining elements of De Vries to achieve the predictable result of frictionally engaging and holding back the advance of all documents of a stack except for one document being fed. Thus, all of the limitations of claim 8 are met by this combination of references.

Response to Arguments

6. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick Mackey/
Supervisory Patent Examiner, Art
Unit 3653

3/13/2010